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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Olivier Brique

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EXAMINER

WRIGHT, BRYAN F

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,428	Applicant(s) BRIQUE ET AL.	
	Examiner BRYAN WRIGHT	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/22/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

1. Claims 17-35 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hardy et al. (EP 0 537971 BA and Hardy hereinafter (cited from IDS)).
3. As to claim 17, Hardy teaches a data exchange method between two devices locally connected to one another (i.e., teaches a communication link between first and second terminal [col. 3, lines 15-20]), especially between a security module and a receiver (i.e., .. teaches a terminal having the ability to encrypted (e.g., secure) message,) the first device comprising at least one first encrypting key of a pair of asymmetric keys and the second device comprising at least the second encrypting key of said pair of asymmetric keys (i.e., ...teaches a each secure terminal contain a pair of key management database [col. 4, lines 50-55] ... further teaches one for encrypting and another for decrypting [col. 4, lines 50-55]), these keys being previously initialised in the first and second device (i.e., .. teaches terminal device maintains the a key database), this method comprising:

- generating, at least one first random number in the first device (i.e., ... teaches generating a random number [col., 6, lines 40-50]), - generating, at least one second random number in the second device (i.e., ... teaches generating a random number [col., 6, lines 40-50] ...further teaches a random number is generated in each terminal [col. 7, lines 1-5]), - encrypting said first random number by said first encrypting key (i.e., ...teaches encrypting random number [col. 6, lines 40-50]), - encrypting said second random number by said second encrypting key (i.e., ...teaches encrypting random number [col. 6, lines 40-50]), - transmitting said first encrypted random number to the second device (i.e., ... teaches random component message exchange [col. 6, lines 45-55]), - transmitting said second encrypted random number to the first device [col. 6, lines 45-55], - decrypting the first encrypted random number in said second device (i.e., ...teaches the message is process using a public key to decrypt the message [col. 6, lines 55-58]) , - decrypting the second encrypted random number in said first device [col. 7, lines 10-15], - combining said random numbers generated by one of the devices and received by the other device to generate a session key (e.g., traffic key) (i.e., ... teaches combining the random to produce a third random used as a traffic key [col. 7, lines 15-25]), - and using the session key (i.e., traffic key) to encrypt and decrypt all or part of the exchanged data between the first and second device (i.e., .. teaches using the traffic key as part of a key generation process for cryptographic process between terminals [col., 7, lines 20-35]).

Art Unit: 2431

4. As to claim 18, Hardy teaches a data exchange method random number (i.e., seed), generated by the first device and decrypted by the second device - is encrypted by said second device by means of said second encrypting key, - is transmitted in a encrypted form to said first device, - is decrypted in this first device by means of the first encrypting key and - is compared to said random number generated by the first device, and wherein the data transfer is stopped if the compared random numbers are not identical (i.e., ...teaches a comparison made between received decrypted encrypted seed and check data pattern with stored version. ... further teaches communication synchronization is dependent on a match [col. 7, lines 50-58 - col. 8, lines 1-5]).

5. As to claim 19, Hardy teaches a data exchange method where the random number (i.e., seed), generated by the second device and decrypted by the first device - is encrypted by said first device by means of said first encrypting key, - is transmitted in a encrypted form to said second device, - is decrypted in this second device by means of the second encrypting key and - is compared to said random number generated by the second device, and wherein the data transfer is stopped if the compared random numbers are not identical (i.e., ...teaches a comparison made between received decrypted encrypted seed and check data pattern with stored version. ... further teaches communication synchronization is dependent on a match [col. 7, lines 50-58 - col. 8, lines 1-5]).

Art Unit: 2431

6. As to claim 20, Hardy teaches a data exchange method in which said first device and said second device contain a symmetric encrypting key, wherein the random numbers are combined with said symmetric key to generate a session key (i.e., ... teaches combining the random to produce a third random used as a traffic key [col. 7, lines 15-25] ... further teaches using the traffic key as part of a key generation process for cryptographic process between terminals [col., 7, lines 20-35]).

7. As to claim 21, Hardy teaches a data exchange method where the combination of said random numbers is a concatenation [col. 9, lines 45-55].

8. As to claim 22, Hardy teaches a data exchange method where the combination of said random numbers is a concatenation [col. 9, lines 45-55].

9. As to claim 23, Hardy teaches a data exchange method where the session key (i.e., traffic key) is regenerated in function of a determined parameter of use (i.e., ... teaches the traffic key is use as a parameter to a key generation process for cryptographic purposes [col. 7, lines 20-35]).

10. As to claim 24, Hardy teaches a data exchange method where the determined parameter of use is the duration of use [col. 7, lines 20-35]).

Art Unit: 2431

11. As to claim 25, Hardy teaches a data exchange method where at least one of the two devices measures at least one representative physical parameter of the communication (i.e., teaches a communication link between first and second terminal [col. 3, lines 15-20]), such as the line impedance and/or the electric consumption, wherein one compares the values measured to the reference values, and wherein one acts on the data exchange when the measured parameters differ from the reference values more than a threshold value (pre-determined number) [col. 9, lines 25-35]).

12. As to claim 26, Hardy teaches a data exchange method where one acts by stopping the data exchange between the two devices [col. 9, lines 25-35]).

13. As to claim 27, Hardy teaches a data exchange method where the session key (i.e., traffic key) is regenerated in function of a determined parameter of use and wherein the determined parameter of use is the representative physical parameter of the communication (i.e., ... teaches generating a traffic key by combining two random number such that the random number [col. 9, lines 35- 58]).

14. As to claim 28, Hardy teaches a data exchange method where - at least one of the devices generates at least one supplementary random number (i.e., ... teach a random number is generated in each terminal [col. 7, lines 1-5], - this supplementary random number is encrypted by said first encrypting key [col. 7, lines 1-5] , - this supplementary encrypted random number is transmitted to the second device [col. 7,

Art Unit: 2431

lines 1-5], - this transmitted encrypted supplementary random number is decrypted in this second device [col. 7, lines 10-15], - the decrypted supplementary random number is encrypted by said second encrypting key (i.e., ... teaches a seed and pattern data is encrypted [col. 10, lines 1-5], - the supplementary encrypted random number is transmitted to the first device (i.e., ...teaches transmission of data [col. 10, lines 5-10], - the supplementary random number decrypted in the first device is compared to the initial supplementary random number generated in said first device (i.e., ... teaches decrypting and comparing data [col. 10, lines 5-15]), - the information exchange is interrupted if the comparison indicates that the two compared numbers are not identical (i.e., ...teaches terminating communication if failure [col. 9, lines 30-36]).

15. As to claim 29, Hardy teaches a data exchange method where - at least one of the devices determines at least one predefined fixed number memorized (i.e., third random number generated from combining to two random number) in the two devices [col. 9, lines 50-58], - this predefined fixed number is encrypted by said first encrypting key, - this predefined fixed encrypted number is transmitted to the second device [col. 10, lines 1-5], - this transmitted encrypted predefined fixed number is decrypted in this second device [col. 10, lines 5-10], - the predefined fixed number decrypted in the second device is compared to the predefined fixed number memorized in this second device [col. 10, lines 11- 16], - the data exchange is interrupted if the comparison indicates that the two compared numbers are not identical [col. 9, lines 30-36].

Art Unit: 2431

16. As to claim 30, Hardy teaches a data exchange method according where each of the numbers is encrypted separately [col. 9, lines 38-41].

17. As to claim 31, Hardy teaches a data exchange method where each of the numbers is encrypted separately [col. 9, lines 38-41].

18. As to claim 32, Hardy teaches a data exchange method where a combination of each of the numbers is encrypted [col. 9, lines 40-50].

19. As to claim 33, Hardy teaches a data exchange method where a combination of each of the numbers is encrypted [col. 9, lines 40-50].

20. As to claim 34, Hardy teaches a receiver for carrying out the method, this receiver comprising at least one calculation unit, a read-only memory, a demultiplexer, a descrambler, a digital/analog converter, an external memory and a sound and image descrambler, wherein at least the calculation unit, the read-only memory and the descrambler are contained in a same electronic chip and wherein at least one of the encrypting keys is stored in said electronic chip (i.e., ... teaches a microcontroller technology [fig. 6] ... further teaches telephone network communication [fig. 1]).

Art Unit: 2431

21. As to claim 35, Hardy teaches a receiver where at least one of the numbers (i.e., first number) is stored in said electronic chip (e.g., terminal) (i.e., ... teaches first random number stored in original terminal [col. 7, lines 10-15]).

Response to Arguments

Applicant's arguments, see Amendment/Req. Reconsideration, filed 8/22/2008, with respect to the rejection(s) of claim(s) 17-35 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hardy et al. (EP 0 537971 BA) The new grounds was prompted by IDS filed by applicant on 8/22/2008. As a result of this filing and applicant paying the fee, this action is made FINAL.

Conclusion

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 8/22/2008 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2431

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN WRIGHT whose telephone number is (571)270-3826. The examiner can normally be reached on 8:30 am - 5:30 pm Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ Sheikh can be reached on (571)272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRYAN WRIGHT/
Examiner, Art Unit 2431

**/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435**